Filing Date: September 15, 2003

Title: INTEGRATED PLATFORM AND FUEL CELL COOLING

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IN THE CLAIMS

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Please amend the claims as follows:

- 1. (Withdrawn) An apparatus comprising:
 - a fuel cell to receive a fuel;
 - an integrated circuit; and
 - a cooling system to cool the integrated circuit, wherein the cooling system includes a

fluid path for the fuel.

- 2. (Withdrawn) The apparatus of claim 1 further comprising:
 - a second integrated circuit; and
- a second cooling system to cool the second integrated circuit wherein the second cooling system includes a fluid cooling medium.
- 3. (Withdrawn) The apparatus of claim 2 wherein the fuel cell includes at least one electrode through which the fluid cooling medium can pass.
- 4. (Withdrawn) The apparatus of claim 3 further comprising a pump to pump the fluid cooling medium.
- 5. (Withdrawn) The apparatus of claim 3 wherein the second cooling system comprises a heat pipe.
- 6. (Withdrawn) The apparatus of claim 2 wherein the second cooling system is adapted to cool the fuel cell.
- 7. (Withdrawn) The apparatus of claim 6 further comprising at least one temperature sensor.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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(Withdrawn) The apparatus of claim 7 wherein the temperature sensor is configured to 8. sense a temperature of the fuel cell.

- 9. (Withdrawn) The apparatus of claim 7 wherein the temperature sensor is configured to sense a temperature of the second integrated circuit.
- 10. (Withdrawn) The apparatus of claim 7 further comprising a control system adapted to modify a fluid flow in response to a temperature sensed by the temperature sensor.
- 11. (Withdrawn) The apparatus of claim 7 further comprising a control system adapted to modify a power output level of the fuel cell in response to a temperature sensed by the temperature sensor.
- (Withdrawn) The apparatus of claim 2 wherein the integrated circuit comprises a 12. processor.
- (Withdrawn) The apparatus of claim 2 wherein the fluid cooling medium comprises a 13. liquid metal.
- 14. (Withdrawn) The apparatus of claim 2 wherein the second cooling system is adapted to have the fluid medium pass through a phase change.
- 15. (Currently Amended) An apparatus comprising:
- a fuel cell having an electrode with fluid passages through which a fluid cooling medium can pass; and
 - a heat generating device to preheat fuel for the fuel cell[[.]];
 - a fuel pump to pump the fuel to the fuel cell;
 - a coolant pump to pump the fluid cooling medium; and
- a control system to influence operation of the fuel pump and coolant pump responsive to a temperature of the fuel cell and a temperature of a processor.

16. (Canceled)

17. (Original) The apparatus of claim 15 wherein the heat generating device comprises an

integrated circuit.

18. (Original) The apparatus of claim 17 wherein the integrated circuit comprises a graphics

circuit.

19. (Currently Amended) The apparatus of claim 17 wherein the integrated circuit comprises

[[a]] the processor.

20. (Original) The apparatus of claim 17 further comprising a cooling system coupled to the

fluid passages.

21. (Original) The apparatus of claim 20 wherein the fluid cooling medium comprises a

liquid metal.

22. (Original) The apparatus of claim 20 further comprising a second integrated circuit

adapted to be cooled by the cooling system.

23. (Original) The apparatus of claim 20 comprising a temperature sensor.

24. (Currently Amended) The apparatus of claim 23 further comprising a wherein the

control system is adapted to increase the fuel cell output when [[a]] the temperature sensed by

the temperature sensor of the fuel cell drops.

25. (Withdrawn) A method comprising:

preheating a fuel for a fuel cell in a first cooling system; and

cooling the fuel cell in a second cooling system.

- 26. (Withdrawn) The method of claim 25 further comprising: sensing a temperature within the second cooling system; and modifying a power output of the fuel cell.
- 27. (Withdrawn) The method of claim 26 wherein sensing a temperature comprises sensing a temperature of the fuel cell.
- 28. (Withdrawn) The method of claim 26 wherein sensing a temperature comprises sensing a temperature of a device cooled by the second cooling system.
- 29. (Withdrawn) An electronic system comprising:
 - a fuel cell to receive a fuel;
 - an integrated circuit;
- a cooling system to cool the integrated circuit, wherein the cooling system includes a fluid path for the fuel; and
 - an antenna coupled to the integrated circuit.
- 30. (Withdrawn) The electronic system of claim 29 wherein the electronic system comprises a computer.
- 31. (Withdrawn) The electronic system of claim 30 wherein the fuel cell is external to the computer.
- 32. (Withdrawn) The electronic system of claim 30 wherein the fuel cell is in a swappable bay of the computer.
- 33. (Withdrawn) The electronic system of claim 30 wherein the fuel cell is semipermanently affixed within the computer.